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TRADE NEWS

Riches of the Great Slave

WE MADE night camp on June 8th in very blowing weather but at sunrise the wind did abate something of its violence and we proceeded to the Northwards, nine miles, following the passage of the river.

"We had entered into the Great Lake Athapuscow, called the Slave Lake because of the many Indians of the Slave tribe in this region."

Thus, wrote young Alexander Mackenzie, in the year 1789, a veteran fur trader of twenty-six; the second white man ever to see Great Slave Lake. Eighteen years before Samuel Hearn had made a journey to the Northern Ocean and told of the Great Lake into which are emptied the waters of innumerable rivers: the Yellowknife; the Hoarfrost; the Snowdrift; the Snare; the Buffalo; the Aylmer; the Hay; and the turbulent Slave itself, all pouring down into ten thousand square miles of water.

Eastwards, barren and forbidding, the pre-Cambrian rock of the Canadian Shield stretches unbroken to the Arctic and Atlantic. Westwards the great Mackenzie river drains through lonely muskeg toward the distant Arctic Sea. In 1789 Great Slave Lake lay buried in the heart of the unknown northwest.

Today, the northward advance of modern civilization has brought the new Mackenzie highway right up to its very shore, to Hay River, the first town in the Northwest Territories to be permanently connected by road to the world outside. Here, as elsewhere in the north, the aeroplane long ago replaced the canoes and York boats of the pioneering fur trade. Men, machines and materials of all kinds are flown in to towns like Yellowknife on the north shore.

A gold mining town, Yellowknife has a population of 3,000. It is 250 miles from the Arctic Circle, has more taxicabs per capita than Montreal or Vancouver, but only 20 miles of roads, leading nowhere.

But the wealth of this northern world is not to be found on land alone. The lake itself, from its windswept reaches and chilliest depths, yields a profitable harvest of fish -- enough to support a $2 million fishing industry.

It all started in 1944, when a team of scientists from the Fisheries Research Board of Canada went to Great Slave to investigate the possibility of establishing a commercial fishery. The water was tested at different seasons and different depths for

temperature, chemical content and animal and vegetable life in many forms. Exhaustive tests were carried out on the fish themselves. The weight and physical dimensions of thousands of fish were recorded. Laboratory tests were made on the scales and insides of the fish.

Information was collected for the purpose of classifying the fish, and to compare them with fish from other waters. By the summer of 1945 it was known for certain that Great Slave Lake contained some of the finest whitefish and lake trout in the world. While the information was still being collected and studied, commercial fishing began. This is the first fishery in Canada to come about as a result of scientific tests made on government initiative and it has since remained under close study and government control.

OPERATE FROM BASE CAMPS

The lake is fished by nine independent companies, each with its own base camp and fleet of boats. Since the lake is navigable only from June to October the camps are set up every summer, and closed at the end of the season. So the fishermen themselves are migrants, and while the camps are operating, there is plenty of work. Nets must be kept free of moss and in good repair. But the most important task of all is the daily trip to the fishing grounds. Two-man crews are the general rule for most boats though some are manned by three and four. Every crew uses personal marker flags to identify its nets.

A gillnet is set in a straight line, usually on or near the bottom, in 30 to 250 feet of water. This net has $5\frac{1}{2}$ inch mesh, which will allow all small fish to swim through unharmed, thus helping to conserve the species. Occasionally as many as 200

fish are hauled aboard in one net. Two to three pounds is about the average size for whitefish; the lake trout average about 10 pounds. The biggest lake trout on record for these waters weighed over 60 pounds. As soon as the net has been lifted the fishermen set it back in approximately the same place, before moving on to lift another.

Each fisherman is licensed to operate 10 nets, which often are set as much as half a day's run from the camp. As a result some boats may be gone from camp almost from one day's end to the next. When they return it may be any time of the day or night. For this is a pioneer industry, and those who take part in it live like all fishermen in the tradition of adventure. Back at the camp the boats unload onto a barge, a sort of floating factory, moored to the shore, where the fish will be cleaned and dressed. The lake trout and whitefish are sorted into separate boxes as they come out of the ice-packed hold. They have been packed in ice since the moment they were taken from the water.

An average day's catch for two men would amount to about 3,000 pounds. More than four million pounds have been taken from the lake in one summer. As soon as they have been cleaned the fish are once more packed in ice, this time in shipping boxes in preparation for a journey that may take them across the continent of North America. The journey begins as the boxes are lowered into the refrigerated hold of a freighter that will carry them a hundred or more miles across the lake, an all night voyage over a lake bigger and more treacherous than Lake Erie and in some places deeper than Lake Superior. Eventually the freighter reaches the southern shore and the town of Hay River, where the highway meets the lake. There the boxes of ice-packed fish start on the second stage of their journey. They are loaded from the freighter into refrigerator trucks. The federal Department of Fisheries keeps records of every shipment.

Off down the Mackenzie Highway, the fish of Great Slave Lake still have 3,000 miles to go. Soon they will be gracing the menus of some of the smartest and most expensive restaurants in the east. By road the boxes of fish reach Grimshaw, Alta. By train they cross the continent to Chicago, Detroit and New York; over 3,000 miles from the chill waters of the Great Slave.

Again from Alexander Mackenzie's journal: "It was suddenly become bitter cold, the lake entirely covered with ice which soon did not seem in any degree to give way beneath a man's weight. The snow and icy wind greatly persecuted us, and the men and Indians were much fatigued."

By November the clear blue summer skies are forgotten in the darkening north. The months of the Indian calendar pass from the Hoarfrost Moon to the Whirlwind Moon, and on to the Extreme Cold Moon. The ptarmigan wears a new camouflage. The caribou, thundering over the ice, gains the whole open lake for his highway. Even man finds a new freedom and a new mobility.

Film Depicts Fishery

The story of the Great Slave Lake fishery, dramatically told in the article on these pages, is based on the narration in the film, "Fisheries Of The Great Slave". It is the newest addition to the growing file of moving films on Canada's fisheries being compiled by the Department of Fisheries of Canada as a means of portraying the far-reaching influence of this oldest of industries on our nation's social and economic structure.

The snowmobile has made commercial fishing on Great Slave Lake a year-round trade. It is equally at home on land and on the frozen lake. Use of the snowmobile and a thorough knowledge of the geography of the lake enables the fishermen to pick a good site.

First of all a hole must be dug through the ice. When the four feet of ice are finally penetrated, the water comes to the fishermen's assistance by carrying the ice chips to the surface where they are easily shovelled off. The next step involves the use of the jigger. This device has the mission of pulling the first line under the ice. While one man jerks on the line to propel the jigger, the other follows the jigger by listening from the surface.

When the jigger has travelled a hundred yards and the fisherman is quite sure that he knows exactly where it is, he digs a second hole through the ice and brings the jigger up. The rope remains stretched under the ice between the two holes, and is then used to pull the net itself under. The net finally comes to rest between the two holes anchored at top and bottom and in that position the men leave it for the span of a day. The next day when the fishermen come back to lift the net the water in the hole has usually frozen over to a depth of four or five inches.

When the fish come out of the water into the extreme cold of the winter air they would soon freeze if the fishermen do not act quickly. Fresh fish commands a better price than frozen fish. Just as fast as they can be cleaned the fish are loaded into the heated snowmobile.

Could Alexander Mackenzie, writing in the 1790's have foreseen all this?

"The climate must needs be severe in such a country, yet the unhospitable region is inhabited by a people much accustomed to the life it requires. Nor has bountiful Nature withheld the means of subsistence." ✔

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